

INTERVIEW

Trade secrets from a sperm bank in India

JYOTSNA AGNIHOTRI GUPTA

Assistant professor in Gender and Diversity, University for Humanistics, Utrecht, and postdoctoral researcher at the International Institute of Asian Studies, Leiden University, THE NETHERLANDS email: jagupta@tiscali.nl

Dr X (pseudonym adopted to protect the identity of the service provider and the sperm bank) is the director of a sperm bank that has been operating since the early 1990s in a large city in India. What follows here is an abridged version of the author's interview with Dr X conducted in December 2001.

JG: Who are your main customers - public hospitals, or also private clinics and individuals?

Dr X: It is mainly private clinics, but [also] individual people; hospitals much less. They're doing [semen collection] on their own premises also. We have a small bank. We get almost 10 donors every day. We try to do our work as thoroughly and as honestly as possible; because there is a lot of *ghapla* [corruption] in this field - in sperm banks. You may not know about it. As for private practitioners - I don't want to say anything about them - whatever they're doing, it is between them and the patient. But we're doing our work very honestly and extremely meticulously. We take a donor's sample and analyse it, and if it is suitable we ask the donor to come and donate. We do all the checks for infectious diseases, HIV, jaundice, etc. We allow them to come twice a week, at the most. Actually, a donor can keep on coming and donating if his sperm counts are normal, and motility and everything else is good. As compensation donors receive some money.

JG: Do they receive a fixed amount per sample?

Dr X: Yes, it's a fixed amount, Rs 200-something. Mostly we encourage students to come. We don't allow just anybody from the street to come and donate, as in blood banks. In India everybody can go and donate their blood to a blood bank. I don't know about other places. But here, we don't allow [that]. We have a restriction that a person who is donating semen should have at least passed class XII. Mostly donors are students from the university in the vicinity. We pay them. If they come twice a week, they get about Rs 400 to 500, and that is for their pocket money.

Moreover, they also come to know about their own physiology. Male fertility is declining very rapidly. From 1948 to 1998 it has gone down by 40 per cent. Males in this country are also getting conscious about this fact, that is why they are interested in coming and donating their semen. Also, they come to know if they have any disease. Because we eliminate diseases - hereditary diseases, HIV, infectious diseases, chlamydia, bacterial diseases, etc. They come very regularly. We take a sample and

keep it if the sample is good and free of all diseases. We take their family history also. If the family history does not show, for two-three generations at least, [any] condition which is genetic, only then we take their sample. If someone comes for the first time we ask him to come again after three months, because the time for incubation of HIV and other diseases is three months.... After three months, when we again screen and see that he is free of all these diseases, abnormal conditions and all that, only then we take his semen and store it. We keep it under liquid nitrogen (196 degrees) in cryo-tanks, where it can be stored for 10 to 15 years and remain quite good.

JG: I've noticed different coloured straws in the container. Do you classify semen under certain categories like physiological characteristics and colour of hair, eyes, etc?

Dr X: We categorise on the basis of three main things - colour of hair, complexion and height. We also note their blood group, so that we can match it. Every week we take out this sample which has been kept separately for quality control. We test it again and see the concentration, how much is the survival of the sperm. For it to be workable the concentration should be 40 million per ml. and the motility should be 50 per cent. After keeping it in liquid nitrogen it becomes about 25 to 30 million per ml. So, there is a loss of about 10 million. But usually you require only one sperm to fertilise. But still we give up to 20 million per ml. That's also according to the WHO norm. We don't take samples that are deficient in sperm count; we only take samples which are very good - 100 million per ml or 80 million per ml. Then even if you lose 50 per cent, after loss you get at least 40 per cent per ml. Before we give the sample we do a quality control again, and see how much loss there is and how much concentration there is, whether it is workable or not. If it is not workable, we don't give that sample.

JG: Are donors anonymous?

Dr X: Yes, totally anonymous. We give the donors this "donor waiver form" so that they don't make a claim at some point of time. There might be so many things.... In the lab it is all coded. Only I know; no one else can find out. The donor never comes to know. He can't find out to whom his sample has been given, whether he has a child. Suppose there is a child born in a rich family, he may become greedy, he may want to blackmail [them], but he can't do any such thing. This form takes care of these legalities.

The duration of abstinence needs to be written on the form here. Abstinence should not be more than six days between the first sample and the second sample. Otherwise, the sperm count goes down. Even seven days is too much. Even when it is the husband's sample that has to be given to the wife, the abstinence should not be more than three days. I don't know exactly what happens, but more than three days after ejaculation the concentration goes down. One can donate semen at the most three to six days after sexual intercourse. Even these boys who come to donate are asked how many days abstinence [they have had]. Abstinence doesn't mean that they must not have had sexual intercourse.... I mean masturbation.... They all masturbate in this age. In our days even to utter the word was considered a crime. We couldn't do any such thing, or even think about it.

JG: In Scandinavian countries, since they renounced anonymity, there are very few sperm donors. In the Netherlands there are two systems, there are those who don't mind their identity being known so that when the child is 16 to 18 and wants to know who the father is then he/she can be told, while there are others who donate only on condition of anonymity.

Dr X: There's a big difference between there and here. Here, infertility is a taboo subject. Even those patients who take samples from us and get pregnant will not [have] the delivery done by the same doctor, because the doctor will come to know they have had a child. Patients even change doctors because there's such a ... taboo on it. People [do not want to admit] that they come here, that they have ever been even in the direction of the sperm bank, or they have ever heard of this sperm bank. But at the same time they are so desperate that it is amazing and shocking also, that the father-in-law is coming to donate his sperm for his *bahu* [daughter-in-law], the *jeith* or *devar* [brother-in-law] is coming to donate. I mean, if it was a friend, an acquaintance, or a far relative it would be something else, the real *dada* [grandfather] is creating his own child - son/daughter, whatever it is. That is how desperate people here are!

JG: Probably they think that at least it is from within the family, rather than someone else's genetic material.

Dr X: Yes, that at least the child's mother is the real mother. We tell them why don't you adopt? There are so many children; but they are not prepared to adopt.

JG: Instead, people are going for IVF which is such a strenuous, long-drawn procedure and not always successful.

Dr X: Its success rate is even lower than artificial insemination by donor. In intra-uterine insemination [IUI] a maximum of six cycles is done. Generally, if it is successful it is within three to four cycles. After that you can keep trying, but it doesn't work. But people are just not prepared to adopt, even from a relative.

JG: Probably adoption has become much less common since these technologies have become more known or in use.

Dr X: Earlier people didn't have alternatives.

JG: Can any individual or doctor take a sample from your bank for insemination?

Dr X: It is only individuals and private sector doctors, because I do not know of any public hospitals that are offering IVF or IUI. We also get husband's sperm for analysis and semen wash. We analyse it, for two things - sperm count and motility. Then we wash it and give it. But the sad thing is that doctors are only concerned with making money; there is no humanity. Please, do not record this.

JG: Please don't worry; I will not disclose your name.

Dr X: When they take the sample and give it to the doctor, the doctor doesn't even take care of it properly. In the liquid nitrogen the sperm is in cold shock; there is no movement, and without movement there is no activity, and there can be no pregnancy. A doctor should keep a proper water bath, maintain temperature at 37 degrees Celsius. You have to keep it for 10 to 15 minutes if you are taking it out of liquid nitrogen; only then it will become conscious, to be motile. After taking it in your hand for two minutes if you say now it is at body temperature - that is not true. There is a big difference between the inside and outside temperature. So, if there is no movement there will be no pregnancy. But they are not bothered to take care of this; this is the most crucial matter. When they take the sample they must keep it at 37 degrees for 10 minutes, then mix it with a syringe, so that the top and the bottom are mixed well. After that you must look under the microscope and see if the count is all right, the motility is ok. Only then you should inject it. Without doing anything they just keep it in hand for a few minutes and inject it. Naturally, it doesn't work. Then people complain to us. Then we ask the doctors, "What procedure did you follow?" They say, "We keep it in the hand for a few minutes and keep it at room temperature after taking it out of liquid nitrogen." In liquid nitrogen it is -190 degrees, under cold shock.

There is so much malpractice to make money. They are just interested in getting their money, whether it works or not. The patients come and tell us these stories. They do not know about the shock. They say the doctor did something quickly. Sometimes they can't even feel if anything went inside. So we don't know what they do. We ask the patient, "How do you know if something went inside or not?" They say they can feel if something is going inside. Well, we don't know if it is so. There is a lot of medical malpractice. When the patients complain to us... we corner [the doctors] and tell them, "You do it incorrectly, you shouldn't do it this way.... You earn so much money, at least keep a water bath at 37 degrees. Keep an incubator." At the most an incubator costs Rs 3,000 to 4,000, but they don't do that.

Let me also tell you... [sometimes] instead of getting semen from our bank, some doctors tell their office boy to get his semen. The office boy brings it and gives it to the doctor. How does the poor patient know where he has brought it from? This is criminal, because he could be suffering from anything, HIV or anything, and without any screening, they inseminate. Our doctors are doing these kinds of things. I'm telling you this, but generally no one talks about this, it is a trade secret.

JG: I read something similar in the newspapers about it.

Dr X: Did you read about it? Well, then it is ok.

JG: I have read about it, but you explained certain things properly, like not maintaining the proper temperature. I had read about doctors taking samples from men who come for certain other tests who were told that a semen sample is also required and then the doctors use it for other patients.

Dr X: They tell [them that the] semen sample was bad, so we threw it away; send us another sample. In this way they get another sample. But they don't throw it away, they get two samples instead of one in this way. We give it because they take from us often; after all this is our business too. I'm telling you the inside story. Because they take samples from us very often, therefore, to keep them happy, sometimes in a month we have to give some doctors four to six extra samples. We, too, have to sell. If this is a doctor who takes [a lot of] samples and says they were bad then we are forced to oblige him. He can dictate his terms, so we must suffer.

JG: Do they also mix fresh semen of someone with frozen sperm?

Dr X: No, then they would just use fresh sperm, why would they mix it with frozen sperm? No one is looking. There is no one of the patient's family in the lab; the patient just trusts you... [They come begging for a good sample.] I tell [them], "We always give good samples, but we don't know what's happening at the doctor's." But when they complain to us, we ask the doctors. Some doctors are doing IUI every day, on six consecutive days, on a woman. They have made that patient a guinea pig continuously for six days. After giving hormones, they check on the monitor every day by ultrasound if the follicle has ruptured, and when it comes in the fallopian tube they inseminate because the chances of fertilisation are better. There is no logic in doing IUI for six consecutive days. They give hormones and think several eggs will be produced, and hope that if we do IUI every day, one or the other egg may fertilise.

Fifty years ago infertility was a female phenomenon, but now it is mostly a male phenomenon - azoospermia. You get such good-looking couples from very well-to-do families who come here. There are even infertile doctors among them. In one case the doctor's brother donated his sperm. What can you do? The wife knows it's his brother's. Very often they take someone else's sperm and give it to their wives without telling them it is not their own. Especially the uneducated people - poor things, they don't know it is not their husband's. They tell their wives, "I'm bringing you my sample. There is some problem with you, something slightly wrong with your system, so they will take out my sperm and inseminate you with it." Then they bring someone else's semen and give it to their wives. The poor wife knows nothing about it. At least you should take your wife in confidence and tell her what you are doing! Just see the kind of things that happen here.

JG: Does it have to do with shame?

Dr X: Yes, it has to do with shame.... Once a very handsome young couple came here. The man was the son of a [senior] army officer. I asked them how they had got married. He said it was a love marriage. Because theirs was a love marriage, the wife said, "Whatever my husband says, I'm prepared to do for him; just because I love him so much. I didn't know earlier and the poor guy didn't know either that there was a problem with his fertility." Males themselves don't know; now they are afraid. That is why they come here now. We have such a [crowd] - at least 10 to 12 males, donors, sitting here every day, to find out about themselves. They are very anxious, and come again and again. "Please check again," they say. When these "rejected goods" come again the second time, we don't pay them... because we don't want to take their sample and waste our money. Sometimes, you get such healthy sperm, so robust, so active and very motile. From such a good sample six to eight vials can be made, so that eight inseminations can take place. Some people have such good quality sperm, but the majority is average, not very good. What we take and store is average and slightly above. We don't take anything below average because it deteriorates further.... Some people have a sperm count of only 2 to 3 per cent. In one field where there should be seven to eight sperm, [and if] there is one, or not even one and they insist that [they will still give us a] sample five or six times and we should concentrate it and give it [back to them]. We did that too... if they are prepared to pay us for it why should we have problems with that? But the count was very low. [One particular case] took the sample for insemination. But we don't know if it worked. Rarely does one come and tell us if it worked - neither doctors nor patients.

JG: There is a spectacular increase in the number of couples who are coming for assisted reproduction, even though it is so expensive.

Dr X: I think it is going to take off very rapidly because of the decline in fertility.

JG: A biological child is considered so important that people are prepared to spend a lot of money for it. Now there are so many centres offering the services.

Dr X: Now even villagers know about it. Some villagers also come here to take sperm and they want to know more about it. I don't know how to explain to them.

JG: A gynaecologist told me that in villages there are *dais* [traditional midwives] who say they "give an injection"; that is, they do artificial insemination.

Dr X: Yes, but you can imagine that if doctors are indulging in such malpractices, in the villages the poor women will die from... all sorts of diseases. The doctors are doing it knowingly; they are really playing with the lives of women. They are not worried about life and death, but only about making money. The more [the number of] women [that] come to them, the more money they will make. The doctors never tell us... how well our product is working. I mean, we treat it as a product, it

is commercial. Once a woman came with sweets and a photo of her child - in her case it was a first attempt. There was another woman who said she was successful in her third attempt. But in some cases they have six to eight inseminations, yet it doesn't work

JG: Doesn't it depend on the tubal factor of the woman too?

Dr X: Yes, that plays a role, but it is also carelessness on the part of doctors. They show no genuineness. It pains me to say this - our assistants go to the doctors and see the conditions there and [report back to] us. I've been only once to a doctor's clinic, and what I saw really made me feel very bad. They do not treat women as human beings, but as animals. They do an insemination and take their money, that's it.

JG: Isn't this unethical?

Dr X: Very unethical!

JG: At the moment there are hardly any guidelines. The ICMR is finalising guidelines. They had a meeting a few weeks ago, the report will be available in a few weeks.

Dr X: Even if there are any guidelines, who follows them? It is an extremely difficult task to have them applied or followed. They have to take legal action about it, that they will not be allowed to practise if they don't follow these guidelines.

JG: Like in the case of sex-determination tests. We have a law,

but there has not been a single prosecution under the law.

Dr X: Not with us, 10 years ago we did separation of sex cells.

JG: But now it is illegal.

Dr X: Yes, the law has been passed, but still people are performing it.

JG: Yes, I too have heard that some doctors are still offering the tests.

Dr X: People are still performing them. It is very easy. Some people come to us, too, and ask us [for it]. We say we don't do the test.... I tell them probably it was done 10 years ago, but not any more; we are not doing it. [But] who is checking here if the law is being observed?

Dr X gives me a round of the lab, after which I thank the doctor and take my leave.

Acknowledgements

The research for this article was conducted within a research project, "Body Parts, Property and Gender," while the author was affiliated as a postdoctoral fellow (December 2000-May 2004) at the Department of Culture, Health and Illness, Leiden University Medical Center, the Netherlands. It was funded by a grant from the Netherlands Foundation for the Advancement of Tropical Research (NWO-WOTRO), Project Number WB 52-871.

If you are looking for India's finest medical journal, then here it is.

The National Medical Journal of India is a premier bi-monthly multi-disciplinary health sciences journal which publishes original research, reviews, and other articles relevant to the practice of medicine in India. The journal aims to instruct, inform, entertain and provide a forum for the discussion of social, economic and political health issues. It is included in the Index Medicus (Pubmed), Excerpta Medica (EmBase), BIOSIS, Current Contents/Clinical Medicine and Science Citation Index.

SUBSCRIPTIONS

	One year	Two years	Three years	Five years
Indian	Rs 600	Rs 1100	Rs 1600	Rs 2600
Overseas	US \$85	US \$150	US \$220	US \$365

Personal subscriptions paid from personal funds are available at 50% discounted rates

Cheques/Demand Drafts should be made payable to **The National Medical Journal of India**. Please add Rs 75 for outstation cheques.

Journals can be sent by registered post on request at an added cost of Rs 90 per annum. Requests to be made at the time of subscribing.

Please send your subscriptions, queries to:

The Subscription Department, *The National Medical Journal of India*, All India Institute of Medical Sciences, Ansari Nagar, New Delhi 110 029. Tel: 91-11-2658-8802 Fax: 91-11-2658-8663 E-mail: nmji@nmji.in Website: www.nmji.in



The National Medical Journal of India
On the frontline of Indian medicine